

CLAIMS

I claim:

1. A method for producing publishable yield information, the method comprising:

obtaining an actual yield value associated with an integrated circuit (IC) or portion of an IC, wherein the IC or portion of an IC is formed on each one of a plurality of wafers using a semiconductor wafer fabrication process;

determining an average yield value associated with a plurality of ICs or portions of an IC formed on each one of the plurality of wafers using the semiconductor fabrication process; and

generating a transformed yield value associated with the IC or portion of an IC using the actual yield value and the average yield value.

2. The method of claim 1, wherein obtaining an actual yield value comprises:

testing the IC or portion of an IC formed on each one of the plurality of wafers; and

determining a number of ICs or portions of an IC that pass the testing,

wherein the actual yield value is a ratio of the number of the ICs or portions of an IC that pass the testing and a total number of ICs or portions of an IC tested.

3. The method of claim 1, wherein determining an average yield value comprises:

testing the plurality of ICs or portions of an IC formed on each one of the plurality of wafers; and

determining a number of the plurality of ICs or portions of an IC that pass the testing,

wherein the average yield value is a ratio of the number of the plurality of ICs or portions of an IC that pass the testing and a total number of the plurality of ICs or portions of an IC tested.

4. The method of claim 1, wherein generating a transformed yield value comprises:

- dividing the actual yield value by the average yield value.
5. The method of claim 4, wherein generating a transformed yield value further comprises:

scaling the actual yield value by a factor.
 6. The method of claim 4, the factor includes one or more sigma values, and wherein scaling the actual yield value comprises:

multiplying the actual yield value by the one or more sigma values.
 7. The method of claim 4, wherein generating a transformed yield value further comprises:

quantizing the actual yield value.
 8. The method of claim 7, wherein quantizing the actual yield value comprises:

defining a range of actual yield values;

dividing the range of actual yield values into a plurality of groups, wherein each group is associated with a number;

sorting the actual yield value into a group from of the plurality of groups; and

replacing the actual yield value with the number associated with the group.
 9. The method of claim 1, wherein the actual yield value cannot be derived from the transformed yield value without knowing the average yield value.
 10. The method of claim 9, wherein the transformed yield value provides a yield characteristic of the IC or portion of the IC.
 11. A method for producing publishable yield information, the method comprising:

obtaining an actual yield value associated with a die formed on each one of a plurality of wafers using a semiconductor wafer fabrication process;

determining an average yield value associated with all dice formed on each one of the plurality of wafers using the semiconductor fabrication process; and

generating a normalized yield value associated with the die by dividing the actual yield value by the average yield value.

12. The method of claim 11, wherein obtaining an actual yield value comprises:

testing the die formed on each one of the plurality of wafers; and

determining a number of dice that pass the testing,

wherein the actual yield value is a ratio of the number of dice that pass the testing and a total number of dice tested.

13. The method of claim 11, wherein determining an average yield value comprises:

testing all of the dice formed on each one of the plurality of wafers; and

determining a number of all of the dice that pass the testing,

wherein the average yield value is a ratio of number of all of the dice that pass the testing and a total number of all of the dice tested.

14. The method of claim 11, wherein generating a normalized yield value further comprises:

scaling the actual yield value by a factor.

15. The method of claim 14, wherein the factor includes one or more sigma values, and wherein scaling the actual yield value comprises:

multiplying the actual yield value by the one or more sigma values.

16. The method of claim 11, wherein generating a normalized yield value further comprises:

quantizing the actual yield value.

17. The method of claim 16, wherein quantizing the actual yield value comprises:

defining a range of actual yield values;

dividing the range of actual yield values into a plurality of groups, wherein each group is associated with a number;

sorting the actual yield value into a group from of the plurality of groups; and

replacing the actual yield value with the number associated with the group.

18. The method of claim 11, wherein the actual yield value cannot be derived from the normalized yield value without knowing the average yield value, and wherein the transformed yield value provides a yield characteristic of the die.

19. A system for producing publishable yield information, the system comprising:

a plurality of wafers having an integrated circuit (IC) or portion of an IC formed on each one of the plurality of wafers;

a tester configured to test the IC or portion of the IC on each one of the plurality of wafers; and

a processor configured to obtain an actual yield value associated with the integrated IC or portion of an IC, determine an average yield value associated with a plurality of ICs or portions of an IC formed on each one of the plurality of wafers, and generate a transformed yield value associated with the IC or portion of an IC using the actual yield value and the average yield value.

20. The system of claim 19, wherein the actual yield value cannot be derived from the transformed yield value without knowing the average yield value, and wherein the transformed yield value provides a yield characteristic of the die.